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A Probe into Promoting the Efficiency of the Administration of Freshmen's Dormitory

Hong Jian

*Jiaxing University, Jiaxing, Zhejiang, P.R. China
83415268@qq.com*

Abstract

By analyzing the characteristic of freshmen, this paper probes into the administration of freshmen's dormitory from the new perspective of dissipative structural theory. Therefore, this paper provides the explanation of some existing problems emerged from the freshmen's dormitory system. And this paper plays the role of guiding the direction of the administration which focuses on the freshmen's dormitory. By means of efficient administration it advocates establishing the dormitory into the activity platform of self-control、self-education、self-service and self-development for party members、league members and students. Meanwhile it advocates establishing the dormitory into the communicating platform concerning study and life for the student- teacher relationship and the platform of innovation for students as well.

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The theory of dissipative structure, founded by I. Prigogine, a Belgium physical scientist, points out:--- An open system which is being away from equilibrium state can form a new stable structure under certain circumstance by means of exchanging substance and energy with outside surroundings, that is, dissipative structure. Further more makes the evolution from being disorderly to orderly. Since the establishment of this theory, it has engendered enormous impact on the field of science and sociology as well.

As freshmen, faced with the reality which is being more and more open and which owns more and more strong interpenetration in information outside, how to converse the state from being disorderly to orderly in time, space and function? And put them in the open system of nonlinear and being away from equilibrium state. Administration of freshmen's dormitory is the complicated system which consists of various elements. And it is also a complicated systematical social project including family, society, university and other educational elements. The research from the perspective of dissipative structural theory on the administration of freshmen's dormitory is of certain realistic significance.

1. Dissipative structural theory-- The new perspective for the research on the administration of freshmen's dormitory

1.1 Dissipative structural theory is a theory which deals with the automatic and being in imbalance.

Prigogine summarized the characteristic of dissipative structure after researching enormous process of automatic system: Being open is the premise and basic prerequisite for forming a new orderly structure. A new system has got to introduce negative entropy of substance, energy and information from outside and expel the production of metabolism so long as it requires to maintain, form and keep the orderly state. Thereby, lets the system be in an orderly state and form dissipative structure. "Imbalance is the source of being orderly.", "imbalance" refers that the system ought to be away from being equilibrium state. It is possible for the form of new orderly structure as long as the system is away from equilibrium state through fluctuation or mutating into a new orderly stable state. "Being nonlinear is the origin of being orderly." implies that Nonlinear Interactions of various elements within complicated system is the inside motivation which pushes system developing towards orderly development. Being nonlinear is the genuine source of realistic world's characteristic of being various, colorful, indirect, bizarre and mercurial. Being appropriate nonlinear in a complicated system requires; "Fluctuation leads to order". Fluctuation refers to a certain variable or behavior in the system being away from the average. Fluctuation is occasional, random and disorganized. Fluctuation is a lever for forming new structure and its incubator as well.

2.1 The dissipative structural characteristic in the administration system of freshmen's dormitory

2.1.1. openness

The administration of freshmen's dormitory is the basic atom of administrating students in higher education. Freshmen's dormitory is an open system . Along with the rapid development of globalization in information, especially the extensive apply of hi-tech ,such as internet, the world is becoming smaller and smaller, "global village" is being come true from imagination. On the one hand, every individual in the system is bound to obtain information of various aspects, level and extent through all kinds of lines., on the other hand, the freshmen in the dormitory system deliver various information relating to dormitory to outside by the same means mentioned above, Therefore, the mutual tunnel is formed-----The dormitory system exchanges information and communicate with outside. But for the freshmen ,they are thirsty for knowledge ,they are eager for exploitation , they desire for creation. Not only do they expect to realize their dream by means of their better intelligence but they expect to own higher spiritual life and harmonious interpersonal relationship. Freshmen have competitive and adventurous awareness ,they are vivacious and vigorous. And they are positive elements in making progress for human being. The community of freshmen belongs to a thorough open community, therefore, freshmen's dormitory is also an open system.[1]

2.1.2 Being away from equilibrium state

Dissipative structure appears only in the condition of being away from equilibrium state and there exists nonlinear mechanism between the different elements in the system. Dissipative structure shows us that being away from equilibrium state is the necessary requirement for the orderly structure in system, that is to say, imbalance is the impetus. Nowadays all the ideological concepts and morals which accommodate with the reform and open policy and social modernization are having significant influence on the undergraduates. There are new changes in ideological concepts and value thoughts in the undergraduates. Their self-awareness is being strengthened continually and they are attaching more and more importance to self-consciousness and individualism, being more and more independent and self-

reliant; Owing to the rapid development of modern information technology, the tunnels of obtaining knowledge and information are being broadened, and the tunnels equipped them with much more amount of knowledge than their former contemporaries. Moreover, the knowledge is not totally gained from traditional class, most proportions are gained from extracurricular, off-campus and communicating with roommates. Undergraduates not merely obey, trust and identify themselves with teachers' administration any more. Meanwhile, more and more undergraduates are beginning to form self-reliant awareness for the administration of freshmen's dormitory. All these cases cause new challenges for the administration of freshmen's dormitory. Freshmen's dormitory system is in the state of "imbalance" because of the following characteristics: Every individual in the new-formed dormitory comes from different regions, different senior middle schools and different families, in addition, there are differences in normal, personality, achievements, hobbies, preference, character, physical state, ambition, habit and temperament, etc.

2.1.3 Nonlinear interaction effect

The administration of freshmen's dormitory is a complicated and colossal project. There are enormous amount of nonlinear effect mechanisms among all the elements for freshmen adapting themselves to the roles. It is hard to measure human being's subjective initiative by means of data simply. In essence the society system is nonlinear. Freshmen's whole behavior is full of nonlinear interaction, instead adding all the isolated parts of their behavior casually. At present freshmen's behavior appears as the following: It is hard for them to adapt themselves to the study habits, interpersonal relationship, take care of themselves and their psychological reaction. It is impossible for the freshmen's adapting elements to be casual nonlinear either in quality or in quantity, and it is impossible to calculate all the subsystems by means of linear. It is impossible to represent the interaction and interrelationship of the individuals in each freshmen's dormitory system, and it can only be registered by means of nonlinear interaction relationship, therefore, this kind of system belongs to the nonlinear area which is in the condition of being away from equilibrium state.

2.1.4 Fluctuation

Though they live in the freshmen's dormitory, new invention, new thoughts and problems emerge in an endless stream, and this occurrence can cause certain impact on the freshmen's thought and psychology. In addition, it can produce random phenomenon of fluctuation. "slight fluctuation" equals to constant adapting adjustment, and it is a universal and common innovative way. Generally this kind of constant adjustment is local in space, continual in time, gradual and frequent in frequency. And it usually occurs at the stable stage of the administration system of freshmen's dormitory. Its influence on the system itself can be dissipated by the system gradually. Within the nonlinear area which is in the condition of being away from equilibrium state, once the inner structural strength from "slight fluctuation" accumulates to an extent, it can cause "huge fluctuation". [2] Furthermore, if the "huge fluctuation" causes the substantial change in structure, it may cause essential leap and sublimation in freshmen's thoughts and morals.

2. The entropy flowing analysis and present status about the administration system of freshmen's dormitory

According to the dissipative structural theory, Each individual's line for gaining information and energy is blocked to an extent under the sealed environment, and the entropy method increases within the system, meanwhile there is no exchange of energy or information between the system and environment, and there is shortage of negative entropy flows. In terms of biology, it is named "still" status, and as the result it weakens the accuracy and efficiency about the administration of freshmen's dormitory.

“Entropy” reinforces the efficient communication with outside surroundings constantly, thereby it keeps vitality and orderliness of the system itself. Whereas in reality the administration system of freshmen’s dormitory may be affected by various subjective and objective conditions, and some problems would occur as the following:

Above all, conventional administration of freshmen’s dormitory merely attaches importance to the target of life, instead of establishing three-dimensional or stereoscopic target system with different levels. And there is no the combination of short-term and long-term target, neither is there the combination of ultimate and gradational target. As a result it neglects the freshmen’s authentic thoughts, psychological level and acceptability, and it is liable to lead to the isolation between individual cognition, affection and behavior.

Secondly, conventional administration of freshmen’s dormitory habitually inculcates traditional thoughts to freshmen as objective extrinsic standard neglecting the innovation of social norms. Thus it keeps away from the connotative value and significance of the lived world. This sort of “submission” which lacks subjective willingness is not the authentic moral significance at all. The commitment and action is usually false when the individual is subjected to extrinsic pressure to “submit”.

Thirdly, conventional administration of freshmen’s dormitory ignores the applied education as a doctrine that theory should be connected with practice. It confines the outcome of education to assessable examination and it diminishes the actual efficiency of education. Conventional administration of freshmen’s dormitory regards the process of idea logical and political education as possessing and accumulating knowledge merely. On the contrary it neglects the fact that dormitory should be regarded as the platform for promoting students’ physical and mental health, employment of their abilities and comprehensive qualities.

Fourthly, there appears a certain unidirectional linear relationship between the administrators, educators and educatees in the educational administration system of freshmen’s dormitory because of the influence of various factors. Solemnly administrators become authority in a certain degree, furthermore the undergraduates in dormitory is taken as instead of purpose itself. And it causes the status inequality each other. However, there is no chance or platform for university teachers to approach to dormitories occasionally,[3] thus causes the isolation between the teacher-student relationship.

3. To explore the administration of freshmen’s dormitory by means of dissipative structural theory

According to the characteristic of the formation of dissipative structure, Faced with the constant changing outside surroundings, we should create conditions positively which are beneficial for freshmen’s healthy development. Only in this way can we make the system evolve and develop continually. The dissipative structural theory provides several inspiration for the administration of freshmen’s dormitory.

3.1 Adopting the openness of education and letting dormitory be the platform for Political Parties and student activities

The administration system of freshmen’s dormitory is an open system and the utilization of its resource is of variety and conformability ,requiring support from material and information resource as well as the joint participation of society、government、school、family and individual; As for the freshmen as the majority in the system, they must import the “negative entropy” of substance 、energy and information from outside(surroundings) constantly ,and expel their “metabolism”, that is, “get rid of the stale and take in the fresh.” In addition, they ought to broaden their horizon、emancipate their minds and mechanism in

order to create relaxing and open environment. Only in open surroundings can they develop constantly. To summarize, we should foster the concept of self-organization in the administration of freshmen's dormitory; In terms of living habit, we try our best to arrange the freshmen who belong to different majors and come from different regions to live in the same building even the same floor. This way is beneficial to the freshmen to acknowledge various living habit formed by those from different areas during the daily life. Gaining information from daily life is helpful for the freshmen who belong to different majors to acquire various newfangled stuff. We should let freshmen adjust to the study habits in university so as to form much more broad horizon of knowledge structure. In terms of activities, universities ought to hold extracurricular activities focusing on dormitory which are beneficial to them to be physical and mental healthy. To establish centers for activities in dormitory and hold various public lectures, speeches and seminars, resolving some heated issues and present puzzles instantly; To invite upperclassmen to hold "friends of their generation" public lectures to give guidance to their puzzles and neutralize their melancholy. All these activities mentioned above is helpful to freshmen to gain information and energy from outside, furthermore influence on their thought and action. It is possible for a system to form and maintain a state of being orderly structure on the condition of being open and "dissipative".

3.2 Letting dormitory be the platform for freshmen's self-control, self-education, self-service and self-development by being away from equilibrium state

Being away from equilibrium state is the necessary requirement for the formation of dissipative structure. The administration system of freshmen's dormitory is an open system, being away from equilibrium state, which connects and interacts with the outside environment. In terms of educational means, Freshmen can produce self-experience firsthand on the basis of self-acknowledgement positively, and then produce self-adjustment and self-control under the impetus of self-experience. At the same time freshmen's consciousness, initiative and enthusiasm can be fully elaborated. They consciously adjust themselves to the requirement of social development and alter their behavior and awareness which are lagged behind society; Thirdly, Freshmen should be guided to get access to various information extensively. They should think, analyze, compare and identify on their own. Freshmen should be encouraged to participate social practice with purpose and plan in expectation of promoting adjusting their abilities and orienting their own role through practice.

3.3 Letting dormitory be the battlefield of communicating, learning and innovating for teachers and undergraduates by giving judicious guidance according to circumstances

It is critical to hold the principle of giving judicious guidance according to circumstances throughout the process of freshmen's adjusting their abilities and orienting their own role in education. As long as there appears nonlinear effect within the educational system of adjusting their abilities and orienting their own role, we can gain the educational effect of achieving maximum results with little effort. In order to get freshmen adjust to the new environment with the fastest speed and optimum psychological state, we should observe the following points: Firstly, Letting dormitory be the battlefield of communicating, learning and coaching for teachers and undergraduates. Teachers should go to some places, such as classroom, dormitory and dining-hall, to communicate with freshmen heartily. And Teachers should investigate carefully about freshmen's mental trait and its developing regularity for the purpose of precisely analyzing freshmen's adjusting and orienting their own role in educational status. [1] Additionally teachers should analyze the characteristic of problems in order to implement reasonable guidance which speaks or acts with a well-defined objective in mind from perspective of theory, affection,

psychology and thought. It can ensure the occurrence of fluctuation in adjusting their abilities and orienting their own role in education, getting the status from being uncertain to stable, and obtaining the optimum effect in adjusting their abilities and orienting their own role in education for freshmen. Eventually teachers should try their best to shorten the “period for gearing with each other” adjusting themselves to the new studying and living circumstance quickly to soar their new sail towards the other shore of dream. Secondly, we should foster freshmen’s creative awareness. Educators should provide special support and interference by establishing creative subject associations and innovative initiative bases in dormitory in order to form freshmen’s creative thoughts and divergent orientation. Besides it can converse “acceptive study” into automatic “probing study”. The administration of freshmen’s dormitory can be full of animation by the quick and best use of various fluctuation in forms of nonlinear effects. Thirdly, we should strengthen the inner coordination of all the elements reducing entropy flow 内熵值 in the system. We should refresh the ideology of service constantly which elaborates humanistic freshmen-oriented work by means of educating undergraduates by all the staff and throughout the process.

4. Conclusion

According to the analyses mentioned above, we can make the conclusion be clear as the following: Not only does dissipative structure can be employed to interpret the problems existing in the administration system of freshmen’s dormitory, but it also can be adopted to guide the implemental direction of the administration system of freshmen’s dormitory. This paper provides theoretical bases for the administration innovation of freshmen’s dormitory. And the creative point of this paper lie in the fact that it probes the administration of freshmen’s dormitory from the new perspective of dissipative structural theory, and it offers some accessible solutions to these problems. The limitations of this study for this paper is that there is no model for entropy or negative entropy. And there is a shortage of empirical analyses. This sort of shortage is expected to be deepen and develop in the further research later on.

References

- [1]Li Xueming. New study of education on the role adaptation and orientation of freshmen----- Discussing from the new perspective of the theory of non-equilibrium auto-organization Ideological and political education
- [2] Liu Shuhua, Yan Xiaoli. 2006: Discussion on the disorderliness and orderliness in higher education----- based on the perspective of dissipative structural theory Heilongjiang Researches on Higher Education[M], 141(1): 5--7
- [3] Chen Zhongzhang. 2010: The modern transition of Ideological and political education--- Interpretation from the horizon of dissipative structural theory. Research on Ideological and political education[M] (1):80--83